

The Honorable Julius Genachowski  
Chairman  
U.S. Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, D.C. 20554

Subject: **IB Docket Number 11-109**. FCC File No. SAT-Mod-20101118-00239, LightSquared  
Subsidiary LLC (LightSquared) Request for Modification of its Authority for an Ancillary Terrestrial  
Component

Dear Chairman Genachowski:

As a member of the unmanned systems community, and also as an ordinary American who likes to know where I am, I have grave concerns about the current waiver request from LightSquared to operate high-powered terrestrial transmitters on a radio frequency adjacent to the weak satellite-based Global Positioning System (GPS). Independent studies indicate that LightSquared's terrestrial operations could completely knock out GPS receivers for miles around each transmitter.

Before the Federal Communications Commission grants LightSquared a waiver to build tens of thousands of high-powered terrestrial transmitters and use a radio frequency adjacent to GPS, we need to understand the impact and consequences on the GPS system better than we currently do.

As you know, all around the world, unmanned systems (air, ground, and maritime), rely on accurate, dependable GPS signals, as do drivers, bicyclists, and anyone who needs to navigate in unfamiliar territory. The lack of a reliable GPS signal here at home poses a serious threat to our public safety and national defense worldwide, as critical testing of new unmanned systems here precedes deployment in combat zones. The potential expense of retrofitting or replacing affected GPS receivers would truly be an undue burden -- not only for unmanned systems users, but also for all other users of GPS.

I believe there must be an appropriate compromise, either in transmitter signal power, frequency choice, or other variables, that will permit all users of radio frequency to coexist safely. Until we discover what that compromise looks like, we must not permit one user to squelch another, especially when the current user impacts so many people in so many critical situations.

I ask that you take careful consideration of the potential harm LightSquared's proposed plan would have on the emerging field of unmanned systems, not to mention all other users of GPS. Thank you for the opportunity to submit comments for the official record.

Sincerely,

Tracy S. Lunquist